Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of claims:

1. (Curently amended): A <u>computer implemented</u> method for the collection and analysis of computer system capacity data in a partition<u>ed computer system having a computer system first partition and a computer system second partition, the computer system having a shared portion of memory accessable to both partitions, the shared memory for transferring information between the computer system first partition and the computer system second partition,</u> the method ~~which determines a sizing metric~~ comprising the steps of:

   a)<u>an analysis application running in a computer system second partition</u> obtaining <u>by way of the shared memory,</u> throughput information of a computer system first partition;

   b) <u>the analysis application</u> obtaining <u>by way of the shared memory,</u> resource utilization information of the computer system first partition;<u> and</u>

   c) <u>the analysis application</u> calculating a resource control parameter using the information obtained~~; and~~

   ~~d) using~~ the resource control parameter ~~to~~ indicat<u>eing</u> resource allocation.

2. The method according to claim 1 wherein the resource utilization_ is CPU utilization.

3. The method according to claim 1 wherein the throughput information is displayed at a terminal as a function of resource utilization.

4. The method according to claim 1 comprising the further step of displaying inter-interval weighted averages as a function of resource utilization.

5. The method according to claim 1 wherein shifted throughput information is displayed at a terminal as a function of resource utilization.

6. The method according to claim 1 wherein the resource control parameter is displayed at a terminal as change in throughput divided by the change in resource utilization verses resource utilization.

7. The method according to claim 6 wherein the display of effective utilization is marked at the utilization at which the resource control parameter is half of its maximum.

8. The method according to claim 1 comprising the further step of using the effective utilization to manage the workload of the first partition.

9. The method according to claim 8 wherein the using step is performed by a workload manager.

10. The method according to claim 9 wherein the workload manager is in a second partition.

11. The method according to claim 1 comprising the further step of providing the throughput information and the resource utilization information for the calculating step by way of a shared memory.

12. The method according to claim 1 comprising the further step of providing the throughput information and the resource utilization information for the calculating step using a single operation memory to memory transfer function.

13. The method according to claim 8 wherein the workload is managed by modifying the resources allocated to the first partition.

14. The method according to claim 13 wherein the resources include I/O.

15. The method according to claim 13 wherein the resources include memory.

16. A method according to claim 13 wherein the resources include processors.

17. A method according to claim 8 wherein the workload is managed dynamically.

18. A method according to claim 1 wherein the throughput information is network packet counts.

19. A method according to claim 1 wherein inverse throughput is the throughput information.

20. A system for the collection and analysis of computer system capacity data in a partition which determines a sizing metric comprising:

      a) means for obtaining throughput information of a computer system first partition;

b) means for obtaining resource utilization information of
the computer system first partition;

c) means for calculating a resource control parameter using
the information obtained; and

d) means for using the resource control parameter to
indicate resource allocation.

21. The system according to claim 20 wherein the resource
utilization is CPU utilization.

22. The system according to claim 20 wherein the throughput
information is displayed at a terminal as a function of resource
utilization.

23. The system according to claim 20 further comprising means
for displaying inter-interval weighted averages as a function of
resource utilization.

24. The system according to claim 20 wherein shifted throughput
information is displayed at a terminal as a function of resource
utilization.

25. The system according to claim 20 wherein the resource control
parameter is displayed at a terminal as change in throughput
divided by the change in resource utilization verses resource
utilization.

26. The system according to claim 25 wherein the display of
effective utilization is marked at the utilization at which the
resource control parameter is half of its maximum.

27. The system according to claim 20 further comprising means for using the effective utilization to manage the workload of the first partition.

28. The system according to claim 27 wherein the using means is a workload manager.

29. The system according to claim 28 wherein the workload manager is in a second partition.

30. The system according to claim 20 further comprising means for providing the throughput information and the resource utilization information for the calculating step by way of a shared memory.

31. The system according to claim 20 further comprising means for providing the throughput information and the resource utilization information for the calculating means using a single operation memory to memory transfer function.

32. The system according to claim 27 wherein the workload is managed by modifying the resources allocated to the first partition.

33. The system according to claim 32 wherein the resources include I/O.

34. The system according to claim 32 wherein the resources include memory.

35. A system according to claim 32 wherein the resources include processors.

36. A system according to claim 20 wherein the workload is managed dynamically.

37. A system according to claim 32 wherein the throughput information is network packet counts.

38. A system according to claim 20 wherein inverse throughput is the throughput information.

39. A computer program product comprising a computer useable medium having computer readable program code means therein for the collection and analysis of computer system capacity data in a partition which determines a sizing metric, the computer readable program means in said computer program product comprising:

    a) computer readable program means for obtaining throughput information of a computer system first partition;

    b) computer readable program means for obtaining resource utilization information of the computer system first partition;

    c) computer readable program means for calculating a resource control parameter using the information obtained; and

    d) computer readable program means for using the resource control parameter to indicate resource allocation.

40. The computer program product according to claim 39 wherein the resource utilization is CPU utilization.

41. The computer program product according to claim 39 wherein the throughput information is displayed at a terminal as a function of resource utilization.

42. The computer program product according to claim 39 further comprising computer readable program means for displaying inter-interval weighted averages as a function of resource utilization.

43. The computer program product according to claim 39 wherein shifted throughput information is displayed at a terminal as a function of resource utilization.

44. The computer program product according to claim 39 wherein the resource control parameter is displayed at a terminal as change in throughput divided by the change in resource utilization verses resource utilization.

45. The computer program product according to claim 44 wherein the display of effective utilization is marked at the utilization at which the resource control parameter is half of its maximum.

46. The computer program product according to claim 39 further comprising computer readable program means for using the effective utilization to manage the workload of the first partition.

47. The computer program product according to claim 46 wherein the using means is a workload manager.

48. The computer program product according to claim 47 wherein the workload manager is in a second partition.

49. The computer program product according to claim 39 further comprising computer readable program means for providing the throughput information and the resource utilization information for the calculating step by way of a shared memory.

50. The computer program product according to claim 39 further comprising computer readable program means for providing the throughput information and the resource utilization information for the calculating means using a single operation memory to memory transfer function.

51. The computer program product according to claim 46 wherein the workload is managed by modifying the resources allocated to the first partition.

52. The computer program product according to claim 51 wherein the resources include I/O.

53. The computer program product according to claim 51 wherein the resources include memory.

54. The computer program product according to claim 51 wherein the resources include processors.

55. The computer program product according to claim 46 wherein the workload is managed dynamically.

56. The computer program product according to claim 39 wherein the throughput information is network packet counts.

57.   The computer program product according to claim 39 wherein inverse throughput is the throughput information.

58. A system for the collection and analysis of computer system capacity data in a partition which determines a sizing metric comprising:

a manager in the computer system, said manager operable to issue a command to obtain throughput information of a computer system first partition;

said manager further operable to issue a command to obtain resource utilization information of the computer system first partition;

said manager further operable to calculate a resource control parameter using the information obtained; and

a monitor connected to said manager, said monitor indicating resource allocation responsive to said resource control.